

Boschmans and Hill Damaras; conducted by Jas. Edward Alexander, K. S. S. 2vols. 12mo. Philada. 1838.

Dr. Morton read an extract from a letter from Dr. Falconer, of the East India Company, in relation to some casts of valuable Sivalik Fossils, which he stated could be obtained by the Academy from the East India House upon applying to the latter through the American Minister at London. The application was accordingly ordered to be made through the Corresponding Secretary.

Dr. Dickeson made some observations on the mode of compression of the cranium in use among the Choctaw Indians, and the supposed object of the same.

Stated Meeting, Nov. 9, 1847.

Vice President MORTON in the Chair.

DONATIONS TO MUSEUM.

Dr. Wilson presented the following mounted Mammalia:—
Semnopithecus comatus, (2 specimens,) *Ateles pentadactylus?* (2 specimens,) *Cercopithecus pithecia*, *C. cynomalgus*, *Inuus nemistrinus*, *Cebus apella*, Lemur ———, *Harpale rufimanus*, *Heazus tardigradus*, *Viverra mellivora*, *V.* ———, (5 specimens,) *Mustela zorilla*, *M. Hernani*, *M. erminea*, *Gulo orientalis*, *Tapirus* ———, *Dasypus tricinctus*, *Sciurus palmarum*, *S. plantani*, *S. melanotus*, *S. Bergianus*, *S. omnicolor*, (2 specimens,) *S.* ———, *Pteromys sagitta*, *P.* ———, *Hylagale Javanica*, (2 specimens,) *Pteropus minimus*, *P. edulis*, *Galeopithecus variegatus*, *Vespertilio serotinus*, *V. pipistrellus*, *V. anritus*, *V. pictus*, *V.* ——— (2 specimens,) *Sorex araneus*, and four Marsupialia. Also the following Saurians:—*Polychrus marmoratus*, *Tejus*

ameiva, *T. monitor*, *Platydactylus vittatus*, *P. guttatus*, *Iguana delicatissima*, *Tupinambis elegans*, (2 specimens,) *T. bivittatus*, *T. ornatus*, *Crocodylus* —, (young,) *Chelonia viridis*, *C.* —, *Emys serratus*, *E.* —, *Testudo* —, and two exuviae of *Coluber constrictor*. Also several fragments of wood bored by a large *Teredo*, nests and eggs of an *Edila*, from the East Indies, nest of *Parus caudatus*, from France, and a species of *Spongia*, from the E. Indies. Mr. J. R. Pollock, of Philadelphia, presented a beautiful and remarkably pure specimen of the newly made comb of the honey bee.

Dr. Morton deposited crania of *Ursus arctos*, of Sweden, and of the *Antilope Americana*, of New Mexico.

DONATIONS TO LIBRARY.

Foraminifères fossiles du Bassin tertiaire de Vienne, découverts par son Excellence le Chevalier Joseph de Hauer, et décrits par Alcide D'Orbigny. 4to. Paris, 1846. From the Author.

American Journal of Agriculture and Science. No. 18, Oct. 1847. The Editors.

Statistics of South Carolina, including a view of its natural, civil, and military history, general and particular. By Robert Mills. 8vo. Charleston, S. C., 1826. In exchange. The following works were deposited by Dr. Wilson:

Reports on Zoology for 1843, '44, (Ray Society.) 8vo. London, 1847.

Narrative of the Surveying voyage of H. M. S. Fly, commanded by Capt. F. P. Blackwood, R. N., in Torres Strait, New Guinea, and other islands of the Eastern Archipelago, during the years 1842, '46, together with an excursion into the interior of the eastern part of Java. By J. Beete Jukes, M. A., &c. 2 vols. 8vo. London, 1847.

Figures of Molluscous animals, selected from various authors;

- etched for the use of students, by Maria Emma Gray. Vol. 1. 8vo. London, 1847.
- Molluscous Animals, including shell-fish, &c. By John Fleming, D. D., &c. 8vo. Edinburg, 1837.
- Elements of Physiophilosophy. By Lorenz Oken, M. D., From the German, by Alfred Tulk, (Ray Society,) 8vo. London, 1847.
- The Naturalist's Library. Vols. 7, 8 and 10, of Ornithology. 12mo.
- Geology for Beginners; comprising a familiar explanation of Geology and its associate sciences, &c. By G. F. Richardson, F. R. S. 8vo. London, 1843.
- The Cabinet Cyclopaedia; conducted by the Rev. Dionysius Lardner, and others. Birds, by William Swainson. Vols. 1 and 2. Geology, by John Phillips. Vols. 1 and 2. 12mo.
- Report of the Geology of the county of Londonderry, and of parts of Tyrone and Fermanagh. By J. E. Portlock, F. R. S., &c. 8vo. Dublin, 1843.
- Proceedings of the Geological Society of London. Vols. 1 2, 3 and 4. 8vo.
- Fossilia Hantoniensia collecta et in Musæo Britannico deposita a Gustavo Brander. 4to. London, 1766.
- The Annals and Magazine of Natural History, No. 132, Sept. 1847.
- Observations on some peculiarities observable in the structure of the Gannet (*Pelecanus bassanus*;) and an account of a new and curious insect, discovered to inhabit the cellular membrane of that bird. By George Montagu, Esq., F. R. S. 8vo. pamphlet.
- Dalman's Trilobites. 1 vol. 4to.
- Nomenclator Zoologicus, continens nomina systematica generum animalium tum viventium quam fossilium, &c. Auctore L. Agassiz. 4to. Soloduri, 1847.
- The Genera of Birds. By George Robert Gray. Part 40. 4to.
- The Genera of Diurnal Lepidoptera. By Edward Doubleday, F. L. S. Part 11. 4to.

- A natural History of Fossils. By Emanuel Mendes da Costa. Vol 1. Part 1. 4to. London, 1757.
- An Introduction to Geology. By Robert Bakewell. Svo. 2d American edition, from 4th London. New Haven, 1833.
- Bartlett's Index Geologicus (chart.)
- A history of the fossils insects in the secondary rocks of England. By the Rev. Peter Bellinger Brodie, M. A., &c. Svo. London, 1845.
- The Quarterly Journal of the Geological Society of London. No. 11. August, 1847.
- Fossils of the Tertiary formations of the United States. By T. A. Conrad. Nos. 1, 2, 3.
- Geological Survey of Pennsylvania. 1st, 2d, 3d, 4th and 5th Annual Reports. By Henry D. Rogers, State Geologist.
- Report of the Geological Reconnoissance of the State of Virginia. By Wm. B. Rogers. Philada., 1836.
- Coloured illustrations of the eggs of British Birds, accompanied with descriptions of the eggs, nests, &c. By Wm. C. Hewitson. 34 Nos. Svo. London.
- Histoire naturelle des Crustacés fossiles, &c.; les Trilobites, par Alex. Brongniart; les Crustacés proprement dits, par Anselme Gaëton Desmarest. 4to. Paris, 1822.
- Description des animaux fossiles qui se trouvent dans le Terrain Carbonifère de Belgique. 2 vols. 4to. Liege, 1842, '44.
- Fauna Boreali-Americana; or the Zoology of the northern parts of British America. By John Richardson, M. D., F. R. S., assisted by Wm. Swainson, Esq., and the Rev. Wm. Kirby. 4 vols. 4to.
- Transactions of the Geological Society of London. 1st series, complete in 5 vols. 4to. 2d series. Vols. 1, (part 2), 2, 3, 4, 5 and 6, and parts 1, 2 and 3 of vol. 7. 4to.
- Icones fossilium sectiles. 4to. pamphlet.
- Beiträge zur Flora der Vorwelt. Von August Joseph Corda. Folio. Prag, 1845.

- An account of the English colony in New South Wales, from its first settlement in January, 1788, to August, 1801, &c. By Lieut. Col. Collins. 4to. London, 1804.
- Narrative of an expedition to explore the river Zaire, usually called the Congo, in South Africa, in 1816, under the direction of Capt. J. K. Tuckey. R. N. &c. 4to. London, 1818.
- Journal of a voyage for the discovery of a north-west passage from the Atlantic to the Pacific, performed in the years 1819–20, in H. M. ships Hecla and Griper, under the orders of Wm. Edward Parry, R. N., F. R. S. 4to. London, 1821; and supplement, 4to. London, 1824.
- Journal of a second voyage, &c., in the years 1821, '22, '23, in H. M. ships Fury and Hecla, under the command of Capt. Parry. 4to. London, 1824; and appendix, 4to. London, 1825.
- Journal of a third voyage, &c., performed in 1824, '25, in H. M. ships Hecla and Fury, under the command of Capt. Parry. 4to. London, 1826.
- The North Georgia Gazette and Winter Chronicle. 4to. London, 1821.
- An account of experiments to determine the figure of the earth, by means of the pendulum vibrating seconds in different latitudes, as well as on other subjects of philosophical inquiry. By Edward Sabine. 4to. London, 1825.

Letters were read from the Chevalier de Hauer, dated Vienna, Sept. 22, 1846, presenting the work, "Foraminifères fossiles du Bassin Tertiaire de Vienne."

And from Mr. John Fehlauds, dated Hamburg, Oct. 14th, 1847, acknowledging the receipt by Dr. Tschudi of Vienna, of the Vols. of the Proceedings, sent to him by resolution of the Academy.

A paper containing a description of a new *Unio*, by Mr.

Haldeman, was read and referred to a committee consisting of Dr. Griffith, Dr. Wilson, and Mr. Phillips.

Dr. Leidy made the following remarks upon the very slow destructibility of animal tissues in certain states.

The great length of time that animal matter may be preserved in a recent form, in ice, is so well known as hardly to need reference to the instance of the Siberian mammoth.

Bones and teeth, under ordinary circumstances, resist the influence of exterior agencies better than any of the other tissues, and then follow epidermic tissue, fibrous tissue, &c. Bones of the mastodon have long since been determined to contain almost as much gelatin as those of recent animals, and I have lately detected, by chemical analysis, the existence of animal matter in a portion of a vertebra of the *Basilosaurus*, a fossil of the Eocene tertiary period. A portion of this animal matter, preserved in alcohol, I exhibit to the Academy. It has a flocculent appearance, contains no gelatin, but readily carbonizes and takes fire, giving out an odour characteristic of burning animal substances; the ash it leaves behind contains a large proportion of oxide of iron.

If not exposed to the influence of air and moisture, bones will retain their animal matter for an indefinite period of time. We have, in the collection of the Academy, bones of the extinct *Megalonyx*, from White Cave, Tennessee, which look as fresh as though prepared but yesterday. But when they are exposed to air, and to alternations of dryness and moisture, or a constant but slightly moistened state, without the presence of carbonate of lime, siliceous earth, or oxide of iron, which tend rather to the preservation than destruction of the animal matter contained in them, the animal matter is gradually and almost wholly removed, leaving nothing but the earthy constituents, which, if they do retain the original form, readily crumble to pieces from the slightest violence. Of the softer animal tissues, the preservation of insects in amber, a resin belonging to a very ancient flora, is well known. But one of the most remarkable instances occurring under ordinary circumstances, which has been presented to my notice, is the existence of portions of fibrous membrane and articular cartilage, attached to some of the bones of the *Megalonyx* before spoken of, as exhibited in these specimens. By examining this piece of fibrous membrane, taken from one of the bones, it will be found to have retained all the characteristics of perfectly recent membrane; it imbibes moisture and becomes as flexible as if fresh. The articular cartilage has become hard and brittle and yellow in colour, and looks like resinous matter. A fragment beneath the microscope presented all the characters of

that form of cartilage, as represented in this drawing, which I took from it. The cartilage corpuscles are well preserved and very distinct. By soaking it in water it does not become tough and flexible, as in recent cartilage, but swells up and forms a thick jelly, which, after a few hours, dissolves in the water, and colours it yellow. A change has taken place in it, corresponding to that which occurs in most organic tissues when constantly kept in the dry state. The atoms or molecules undergo a change of relation in regard to each other, or new chemical combinations take place without destroying the form of the dried object, but destroying the power of its resuming its original form. The change is an exceedingly slow one; in many instances, after centuries have elapsed, no perceptible change has taken place. An instance in point was lately presented to us by Dr. Morton, who put a dried ear of an Egyptian mummy of the time of the Pharaohs, into water, in the hope that it would resume its former proportions, but instead of so doing, for a few days it appeared to undergo no change, except colouring the water yellow, as in the case of the articular cartilage of the Megalonyx. It then suddenly underwent rapid decomposition, and in the course of a day entirely disappeared; the solution for two days exhaled a putrid odour, which then disappeared, leaving the fluid coloured yellow and without further change.

A report was presented from the committee appointed on the subject of exchanges with M. Vattermare, proposing to forward to him for works lately received two copies of Vols. 1 and 2 of the Proceedings; and also to place in his hands for further exchanges, additional copies of the same, which was accordingly ordered.

Stated Meeting, November 16, 1847.

VICE PRESIDENT MORTON in the Chair.

DONATIONS TO MUSEUM.

Cytherea, from California, presented by Dr. Joseph Wilson, U. S. N.

Boa constrictor, 12 feet long. Presented by Messrs. Raymond & Waring, through Dr. Watson.